November 30, 1956

Dear Dr. Heidelberger:

Thank you for your answer of the 28th to my inquiry about the pneumococcal polysaccharides. In the interim, I have gotten to see the Macy Foundation Symposium, and have learned worlds of details from the discussion there. I am also looking forward to studying the articles you cited in your letter.

There is every reason the geneticists should understand the structures of the compounds they are dealing with in the pneumococcus transformations. Until now, this has not been looked at as a typical problem in "biochemical genetics" perhaps because of the difficulties of defining the synthetic steps. But I am hopeful that the genetic approach can be tied in with other chemical methods. First we should have some sort of in vitro system for polysaccharide synthesis. Bernheimer made a start at it some time ago, but without much success. Any chance of your getting into that?: if there were any way of encouraging that, I would.

Yours sincerely,

Joshua Lederberg